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DKing  
10/23/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Confirmation No.: 8085

YAMADA et al.

Group Art Unit: 2822

Appln. No.: 09/993,967

Examiner: Lewis, Monica

Filed: November 27, 2001

Title: SEMICONDUCTOR DEVICE WITH VERTICAL TRANSISTOR FORMED IN A  
SILICON-ON-INSULATOR SUBSTRATE (As Amended)

October 16, 2002

\* \* \* \* \*

AMENDMENT

Hon. Commissioner of Patents  
Washington, D.C. 20231

Sir:

In response to the Office Action dated July 17, 2002, please enter the following  
amendments and remarks:

IN THE TITLE:

Please delete the present title and replace it with the following new title:

SEMICONDUCTOR DEVICE WITH VERTICAL TRANSISTOR FORMED IN A  
SILICON-ON-INSULATOR SUBSTRATE

Please see the attached Appendix for the changes made to effect the title.

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 9 with the following new  
paragraph:

A1  
This invention relates in general to semiconductor microtechnologies and, more  
specifically, to highly integrated semiconductor devices with dynamic random access memory  
(DRAM) cells each having a trench capacitor and a vertical transistor that works  
perpendicular to the surface of a semiconductor chip. The invention also relates to  
methodology for fabrication of semiconductor devices of the type stated above.

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TECHNOLOGY CENTER 2800

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10/18/2002 HJ/DJN61 00000016 033975

108.00 CH  
84.00 CH

01 FC:1202  
02 FC:1201

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION **28228**

Inventor(s): YAMADA et al.

Appl. No.: 09

993,967

Series Code ↑

Serial No. ↑

Filed: November 27, 2001

Hon. Commissioner of Patents  
Washington, D.C. 20231

Group Art Unit 2822

Examiner: Lewis, Monica

Atty. Dkt. P

284032

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M#

Client Ref

Appl. Title: SEMICONDUCTOR DEVICE WITH  
VERTICAL TRANSISTOR FORMED IN  
A SILICON-ON-INSULATOR  
SUBSTRATE (As Amended)

Sir:

**REPLY/AMENDMENT/LETTER**

Date: October 16, 2002

This is a reply/amendment/letter in the above-identified application and includes the herewith attachment of same date and subject which is incorporated hereinto by reference and the signature below is treated as the signature to the attachment in absence of a signature thereto.

**FEE REQUIREMENTS FOR CLAIMS AS AMENDED**

## 1. Small Entity claim

- A. ☐ NOT made  
B. ☐ Withdrawn  
C. ☐ made herewith  
D. ☐ made previously

For B & C  
See **Required**  
**Separate Paper**  
(Pat-256)

	Claims remaining after amendment	Highest number previously paid for	Present Extra	Large/Small Entity	Additional Fee	Fee Code Lg/Sm
2. Total Effective Claims	26	**minus 20	6	x \$18/\$9 =	+ \$108	103/203
3. Independent Claims	6	***minus 5	1	x \$84/\$42 =	+ \$84	102/202
4. If amendment enters <u>proper</u> multiple dependent claim(s) into this application for <u>first</u> time (leave blank if this is a reissue application) .....	add			+ \$280/\$140 =	+ \$0	104/204
5. Original due Date: October 17, 2002	<input type="checkbox"/> NONE					
6. Petition is hereby made to extend the original due date to cover the date this response is filed for which the requisite fee is attached	(1 mo)	\$110/\$55 =				115/215
	(2 mos)	\$400/\$200 =		+ \$0		116/216
	(3 mos)	\$920/\$460 =				117/217
	(4 mos)	\$1,440/\$720 =				118/218
	(5 mos)	\$1,960/\$980 =				128/228
7. Enter any previous extension fee paid since above original due date and subtract	- \$0					
8.	Extension Fee			+ \$0		
9. If Terminal Disclaimer attached, add Rule 20(d) official fee .....	+ \$110/\$55			+ \$0		148/248
10. If IDS attached requires Official Fee under Rule 97 (c), .....	add + \$180			+ \$0		126
or if Rule 97(d) Request .....	add + \$180					126
11. After-Final Request Fee per rules 129(a) and 17(r) .....	+ \$740/370			+ \$0		146/246
12. No. of additional inventions for examination per Rule 129(b) .....	x \$740/370 ea			+ \$0		149/249
13. Request for Continued Examination (RCE) .....	+ \$740/370			+ \$0		1179/1279
14. Petition fee for .....				+ \$0		
15.	TOTAL FEE =				\$192	

16. \*If the entry in this space is less than entry in next space, the "Present Extra" result is "0".

17. \*\*If the "Highest number previously paid for" in this space is less than 20, write "20" in this space.

18. \*\*\*If the "Highest number previously paid for" in this space is less than 3, write "3" in this space.

**PLEASE CHARGE  
OUR DEP. ACCT**

Our Deposit Account No. 03-3975)

(Our Order No. 44020

284032

C#

M#

**CHARGE STATEMENT:** The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a duplicate copy of this sheet is attached.

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

Query: Is appeal deadline now? If so, file Notice of Appeals separately.

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Pillsbury Winthrop LLP  
Intellectual Property Group

By Atty: Dale S. Lazar

Sig:

Reg. No. 28872

Fax: (703) 905-2500  
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Atty/Sec: DSL/VVK

NOTE: File this cover sheet in duplicate with PTO receipt (PAT-103A) and attachments